

One City Center – ESC/ETS meeting Jan 20, 2022

We look forward to having the Atlantic Realty development team join us for the joint meeting of the City of Falls Church Environmental Sustainability Council (ESC) and its Energy Transition Subcommittee (ETS). To make the meeting as productive as possible, a list of comments and questions from ESC and ETS members is provided below.

We appreciate the progress that the Atlantic Realty team has made toward developing an environmentally sustainable One City Center project. Among the many sustainability features of the proposed project, we note Atlantic Realty's commitments to LEED Gold certification; 20% improvement in energy efficiency; electric vehicle (EV) charging stations adjacent to 5% of parking spaces; 20.4% parking count reduction; and the City Center Park.

Embodied Carbon

Embodied carbon (i.e., greenhouse gas emissions associated with the manufacturing, transportation, installation, maintenance, and disposal of construction materials) represents a substantial share of the carbon emissions from a building over its lifetime. What steps will be taken to minimize embodied carbon? For example, will you use low-carbon concrete, high recycled content rebar, low- or no-embodied-carbon insulation? Will you utilize tools such as the Embodied Carbon in Construction Calculator (EC3) to evaluate the carbon impact and cost of building materials?

We recommend that the project earn two points under LEED credit Construction and Demolition Waste Management (Material and Resources).

Renewable Energy

The City of Falls Church has committed to reduce its greenhouse gas emissions by 80 percent by 2050. Renewable energy is essential to reduce a building's greenhouse gas emissions closer to net zero carbon. We strongly urge Atlantic to commit that rooftop area not used for resident amenities and green roof plantings is maximally used for PV panels (for the new and existing buildings), while retaining all RECs. We request that Atlantic obtain at least two evaluations from PV installers and share evaluations with the ESC and ETS.

Electric Vehicle Chargers

A conduit-routing and transformer plan should be established to minimize the costs of adding EV chargers in the future (e.g., minimizing long conduit runs, x-ray, drilling, demolition, etc.). For example, Founders Row 2 is proposing routing conduit to 50% of residential spaces. The ESC has provided City Council with a memo on this topic. Here is a link to the memo:

<http://www.fallschurchva.gov/DocumentCenter/View/14769/2021-06-EV-Charging-Station-Recommendations-210602>

Given the rapid growth of the EV market, we recommend that Atlantic make 15% of parking spaces EV Ready. Per LEED, EV Ready requires a dedicated electrical circuit with sufficient capacity for each required space. Each circuit shall have conduit and wire sufficient to provide Level 2 charging or greater, and shall end at an electrical box or enclosure located near each required space.

Since Atlantic Realty retains the option of converting from apartments to condominiums, we request that it commit to (a) granting all condo owners charger-installation rights appurtenant to their parking space and/or (b) performing installation of resident- or building-owned chargers with no liability falling to the resident.

Please clarify the number of EV chargers allocated to the various categories of parking spaces. We recommend that some chargers be allocated to the free public spaces.

New Building Energy Efficiency

Please confirm that “attain a minimum of 20 percent energy efficiency” means a minimum 20% improvement in the building performance rating compared with the LEED v4 baseline (ANSI/ASHRAE/IESNA Standard 90.1–2010), which would earn a minimum of 8 points (per LEED v4 - Energy and Atmosphere, Optimize energy performance).

How will you demonstrate that the building has achieved the 20% energy efficiency improvement, post-occupancy? Will you use Energy Star Portfolio Manager, or utility data to confirm the LEED design site EUI? What do you expect the Energy Star score and site EUI to be?

Will there be any combustion in the building? If so, describe? We encourage full electrification.

Existing Building Energy Efficiency

Are there energy efficiency improvements planned for the existing buildings? Will the façade and window upgrades reduce their energy use intensity and, if so, by how much? Would you be interested in Property-Assessed Clean Energy financing for these upgrades? The City does not currently have its own program, but a State program is developing. The City might consider adopting a program if there is a need.

Refrigerants

VCs commit to not using CFC refrigerants in building systems. CFC production was banned in the 1990s. HCFCs and HFC refrigerants with high Global Warming Potential (GWP) are also being phased out. Will building systems be installed initially with low-GWP refrigerants, or will high-GWP HFCs be used and equipment/performance altered as HFC availability dwindles? Will a low-GWP approach be imposed on the grocery and restaurants?

Parking

Is there any additional reduction in parking that can be achieved without jeopardizing the project's feasibility?

Heat Island Effects and Shading

How will you mitigate heat island effects and provide shade for southerly facades and outdoor spaces?

Solid Waste Management

We recommend collection of compostable materials from residents and restaurants.

Exterior Lighting

Does Voluntary Concession 6 mean the project will earn one LEED point for Light pollution reduction, Sustainable Sites? We recommend only fixtures that are Dark-Sky Approved by the International Dark-Sky Association. To reduce energy consumption, fixtures should use timers, PV cells, motion sensors, or similar.

Bird Friendly Materials

Describe how you will incorporate bird-friendly materials into the new and existing buildings.

City Center Park

We suggest conducting deep soil remediation and planting a beech tree at the park's center (with understory trees and native plantings around it until the beech tree has grown to its full size). Use native plants and natural leaf mulch for ground cover. No turf or artificial grass.

LEED

Why will you be certifying using LEED version 4 vs version 4.1? Will it be LEED BD+C: New Construction v4? When will a preliminary LEED scorecard and narrative (describing the points you plan to achieve and how you plan to achieve them) be provided to the ESC and ETS?